Release Notes for Cisco Secure Firewall ASDM, 7.22(x)

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Release Notes for Cisco Secure Firewall ASDM, 7.22(x)

This document contains release information for ASDM version 7.22(x) for the Secure Firewall ASA.

Important Notes

- **No support in ASA 9.22(1) and later for the Firepower 2100**—ASA 9.20(x) is the last supported version.
- **Smart licensing default transport changed in 9.22**—In 9.22, the smart licensing default transport changed from Smart Call Home to Smart Transport. You can configure the ASA to use Smart Call Home if necessary using the **transport type callhome** command. When you upgrade to 9.22, the transport is automatically changed Smart Transport. If you downgrade, the transport is set back to Smart Call Home, and if you want to use Smart Transport, you need to specify **transport type smart**.

System Requirements

ASDM requires a computer with a CPU with at least 4 cores. Fewer cores can result in high memory usage.

ASDM Java Requirements

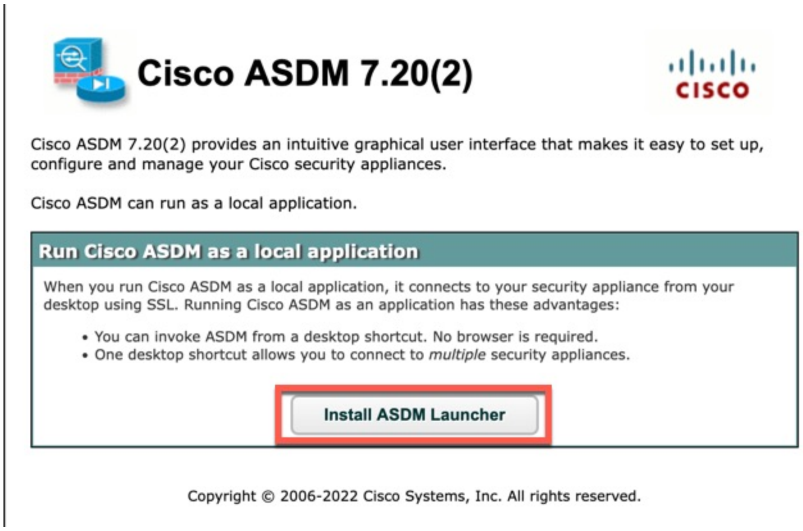
You can install ASDM using Oracle JRE 8.0 (**asdm-*version*.bin**) or OpenJRE 1.8.x (**asdm-openjre-*version*.bin**).

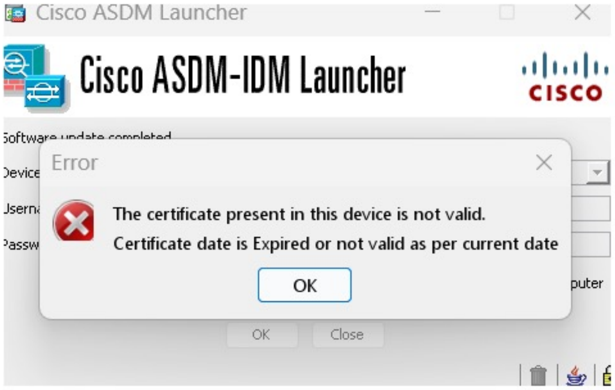
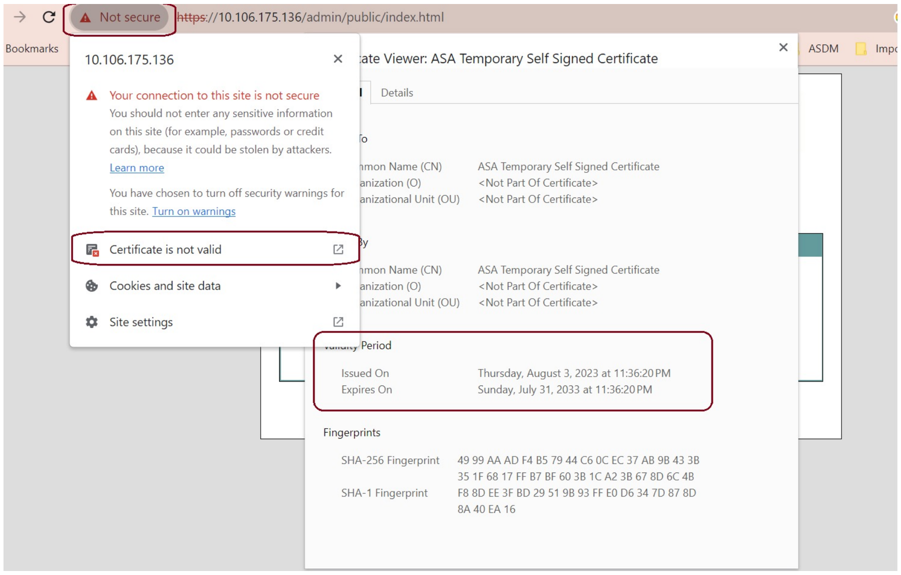
Table 1: ASDM Operating System and Browser Requirements

Operating System	Browser			Oracle JRE	OpenJRE
	Firefox	Safari	Chrome		
Microsoft Windows (English and Japanese): • 11 • 10 **Note** See Windows 10 in ASDM Compatibility Notes, on page 2 if you have problems with the ASDM shortcut. • 8 • 7 • Server 2016 and Server 2019 • Server 2012 R2 • Server 2012 • Server 2008	Yes	No support	Yes	8.0 version 8u261 or later	1.8 **Note** No support for Windows 7 or 10 32-bit
Apple OS X 10.4 and later	Yes	Yes	Yes (64-bit version only)	8.0 version 8u261 or later	1.8

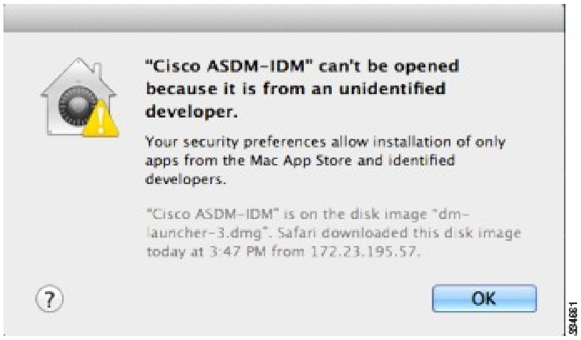
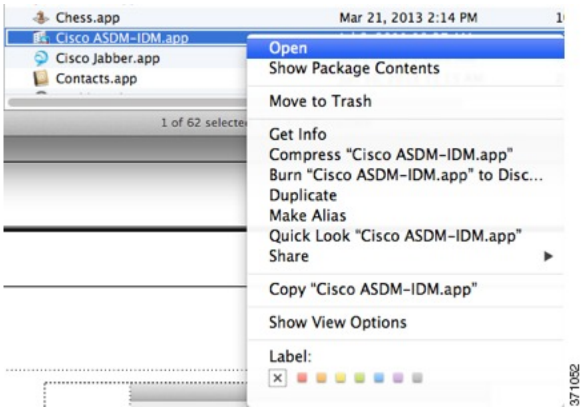
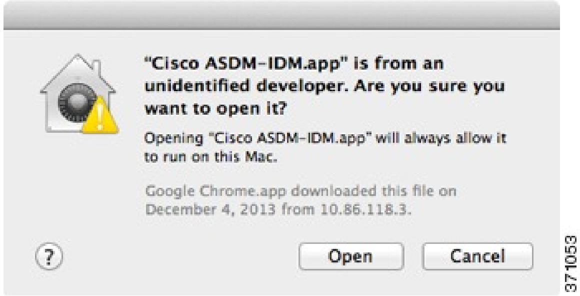
ASDM Compatibility Notes

The following table lists compatibility caveats for ASDM.

Conditions	Notes
ASDM Launcher compatibility with ASDM version	"**Unable to Launch Device Manager**" error message. If you upgrade to a new ASDM version and then get this error, you may need to re-install the latest Launcher. **1.** Open the ASDM web page on the ASA: https://<asa_ip_address>. **2.** Click **Install ASDM Launcher**. *Figure 1: Install ASDM Launcher*  Cisco ASDM 7.20(2) Cisco ASDM 7.20(2) provides an intuitive graphical user interface that makes it easy to set up, configure and manage your Cisco security appliances. Cisco ASDM can run as a local application. Run Cisco ASDM as a local application When you run Cisco ASDM as a local application, it connects to your security appliance from your desktop using SSL. Running Cisco ASDM as an application has these advantages: • You can invoke ASDM from a desktop shortcut. No browser is required. • One desktop shortcut allows you to connect to *multiple* security appliances. Copyright © 2006-2022 Cisco Systems, Inc. All rights reserved. **3.** Leave the username and password fields empty (for a new installation), and click **OK**. With no HTTPS authentication configured, you can gain access to ASDM with no username and the **enable** password, which is blank by default. When you enter the **enable** command at the CLI for the first time, you are prompted to change the password; this behavior is not enforced when you log into ASDM. We suggest that you change the enable password as soon as possible so that it does not remain blank. **Note**: If you enabled HTTPS authentication, enter your username and associated password. Even without authentication, if you enter a username and password at the login screen (instead of leaving the username blank), ASDM checks the local database for a match.

Conditions	Notes
Self-signed certificate not valid due to a time and date mismatch with ASA	ASDM validates the self-signed SSL certificate, and if the ASA's date is not within the certificate's **Issued On** and **Expires On** date, ASDM will not launch. If there is a time and date mismatch, you will see the following error: *Figure 2: Certificate Not Valid*  Error The certificate present in this device is not valid. Certificate date is Expired or not valid as per current date Cisco ASDM Launcher Cisco ASDM-IDM Launcher Software update completed Device Userna Passw puter OK OK Close **To fix the issue:** Set the correct time on the ASA and reload. To check the certificate dates, (example shown is Chrome): **1.** Go to https://*device_ip*. **2.** Click the **Not secure** text in the menu bar. **3.** Click **Certificate is not valid** to open the Certificate Viewer. **4.** Check the Validity Period. *Figure 3: Certificate Viewer*  Not secure ~~https~~://10.106.175.136/admin/public/index.html 10.106.175.136 Your connection to this site is not secure You should not enter any sensitive information on this site (for example, passwords or credit cards), because it could be stolen by attackers. Learn more You have chosen to turn off security warnings for this site. Turn on warnings Certificate is not valid Cookies and site data Site settings ate Viewer: ASA Temporary Self Signed Certificate Details o mon Name (CN) ASA Temporary Self Signed Certificate anization (O) <Not Part Of Certificate> anizational Unit (OU) <Not Part Of Certificate> y mon Name (CN) ASA Temporary Self Signed Certificate anization (O) <Not Part Of Certificate> anizational Unit (OU) <Not Part Of Certificate> Period Issued On Thursday, August 3, 2023 at 11:36:20 PM Expires On Sunday, July 31, 2033 at 11:36:20 PM Fingerprints SHA-256 Fingerprint 49 99 AA AD F4 B5 79 44 C6 0C EC 37 AB 9B 43 3B 35 1F 68 17 FF B7 BF 60 3B 1C A2 3B 67 8D 6C 4B SHA-1 Fingerprint F8 8D EE 3F BD 29 51 9B 93 FF E0 D6 34 7D 87 8D 8A 40 EA 16

Conditions	Notes
Windows Active Directory directory access	In some cases, Active Directory settings for Windows users may restrict access to program file locations needed to successfully launch ASDM on Windows. Access is needed to the following directories: • Desktop folder • C:\Windows\System32C:\Users\<username>\.asdm • C:\Program Files (x86)\Cisco Systems If your Active Directory is restricting directory access, you need to request access from your Active Directory administrator.
Windows 10	"**This app can't run on your PC**" error message. When you install the ASDM Launcher, Windows 10 might replace the ASDM shortcut target with the Windows Scripting Host path, which causes this error. To fix the shortcut target: **1.** Choose **Start** > **Cisco ASDM-IDM Launcher**, and right-click the **Cisco ASDM-IDM Launcher** application. **2.** Choose **More** > **Open file location**. Windows opens the directory with the shortcut icon. **3.** Right click the shortcut icon, and choose **Properties**. **4.** Change the **Target** to: **C:\Windows\System32\wscript.exe invisible.vbs run.bat** **5.** Click **OK**.
OS X	On OS X, you may be prompted to install Java the first time you run ASDM; follow the prompts as necessary. ASDM will launch after the installation completes.

Conditions	Notes
OS X 10.8 and later	You need to allow ASDM to run because it is not signed with an Apple Developer ID. If you do not change your security preferences, you see an error screen.  "Cisco ASDM-IDM" can't be opened because it is from an unidentified developer. Your security preferences allow installation of only apps from the Mac App Store and identified developers. "Cisco ASDM-IDM" is on the disk image "dm-launcher-3.dmg". Safari downloaded this disk image today at 3:47 PM from 172.23.195.57. 1. To allow ASDM to run, right-click (or Ctrl-Click) the Cisco ASDM-IDM Launcher icon, and choose **Open**.  Chess.app Mar 21, 2013 2:14 PM Cisco ASDM-IDM.app Cisco Jabber.app Contacts.app 1 of 62 selecte Open Show Package Contents Move to Trash Get Info Compress "Cisco ASDM-IDM.app" Burn "Cisco ASDM-IDM.app" to Disc... Duplicate Make Alias Quick Look "Cisco ASDM-IDM.app" Share Copy "Cisco ASDM-IDM.app" Show View Options Label: 371052 2. You see a similar error screen; however, you can open ASDM from this screen. Click **Open**. The ASDM-IDM Launcher opens.  "Cisco ASDM-IDM.app" is from an unidentified developer. Are you sure you want to open it? Opening "Cisco ASDM-IDM.app" will always allow it to run on this Mac. Google Chrome.app downloaded this file on December 4, 2013 from 10.86.118.3.

Conditions	Notes
Requires Strong Encryption license (3DES/AES) on ASA **Note** Smart licensing models allow initial access with ASDM without the Strong Encryption license.	ASDM requires an SSL connection to the ASA. You can request a 3DES license from Cisco: 1. Go to www.cisco.com/go/license. 2. Click **Continue to Product License Registration**. 3. In the Licensing Portal, click **Get Other Licenses** next to the text field. 4. Choose **IPS, Crypto, Other...** from the drop-down list. 5. Type **ASA** in to the **Search by Keyword** field. 6. Select **Cisco ASA 3DES/AES License** in the **Product** list, and click **Next**. 7. Enter the serial number of the ASA, and follow the prompts to request a 3DES/AES license for the ASA.
• Self-signed certificate or an untrusted certificate • IPv6 • Firefox and Safari	When the ASA uses a self-signed certificate or an untrusted certificate, Firefox and Safari are unable to add security exceptions when browsing using HTTPS over IPv6. See https://bugzilla.mozilla.org/show_bug.cgi?id=633001. This caveat affects all SSL connections originating from Firefox or Safari to the ASA (including ASDM connections). To avoid this caveat, configure a proper certificate for the ASA that is issued by a trusted certificate authority.
• SSL encryption on the ASA must include both RC4-MD5 and RC4-SHA1 or disable SSL false start in Chrome. • Chrome	If you change the SSL encryption on the ASA to exclude both RC4-MD5 and RC4-SHA1 algorithms (these algorithms are enabled by default), then Chrome cannot launch ASDM due to the Chrome “SSL false start” feature. We suggest re-enabling one of these algorithms (see the **Configuration** > **Device Management** > **Advanced** > **SSL Settings** pane); or you can disable SSL false start in Chrome using the **--disable-ssl-false-start** flag according to Run Chromium with flags.

Install an Identity Certificate for ASDM

When using Java 7 update 51 and later, the ASDM Launcher requires a trusted certificate. An easy approach to fulfill the certificate requirements is to install a self-signed identity certificate.

See Install an Identity Certificate for ASDM to install a self-signed identity certificate on the ASA for use with ASDM, and to register the certificate with Java.

Increase the ASDM Configuration Memory

ASDM supports a maximum configuration size of 512 KB. If you exceed this amount you may experience performance issues. For example, when you load the configuration, the status dialog box shows the percentage of the configuration that is complete, yet with large configurations it stops incrementing and appears to suspend operation, even though ASDM might still be processing the configuration. If this situation occurs, we recommend that you consider increasing the ASDM system heap memory. To confirm that you are experiencing memory exhaustion, monitor the Java console for the "java.lang.OutOfMemoryError" message.

Increase the ASDM Configuration Memory in Windows

To increase the ASDM heap memory size, edit the **run.bat** file by performing the following procedure.

Procedure

Step 1 Go to the ASDM installation directory, for example C:\Program Files (x86)\Cisco Systems\ASDM.

Step 2 Edit the **run.bat** file with any text editor.

Step 3 In the line that starts with "start javaw.exe", change the argument prefixed with "-Xmx" to specify your desired heap size. For example, change it to -Xmx768M for 768 MB or -Xmx1G for 1 GB.

Step 4 Save the **run.bat** file.

Increase the ASDM Configuration Memory in Mac OS

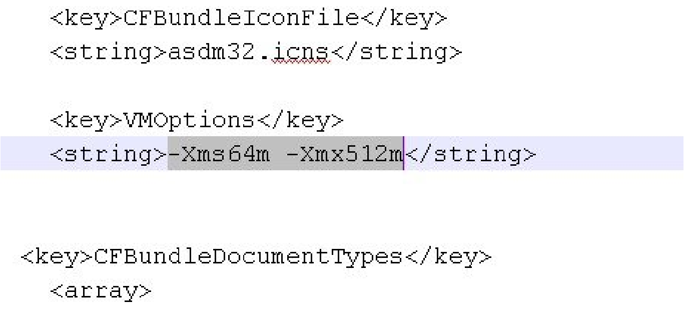
To increase the ASDM heap memory size, edit the **Info.plist** file by performing the following procedure.

Procedure

Step 1 Right-click the **Cisco ASDM-IDM** icon, and choose **Show Package Contents**.

Step 2 In the **Contents** folder, double-click the **Info.plist** file. If you have Developer tools installed, it opens in the **Property List Editor**. Otherwise, it opens in **TextEdit**.

Step 3 Under **Java** > **VMOptions**, change the string prefixed with "-Xmx" to specify your desired heap size. For example, change it to -Xmx768M for 768 MB or -Xmx1G for 1 GB.

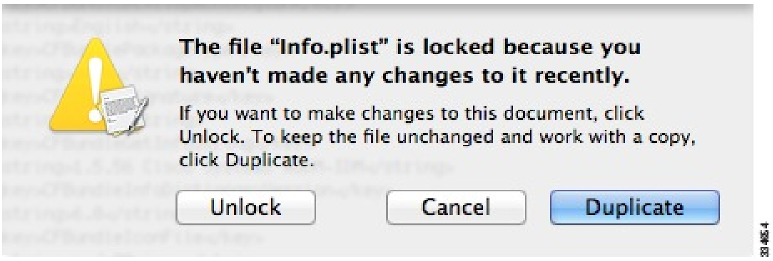


```
    <key>CFBundleIconFile</key>
    <string>asdm32.icns</string>

    <key>VMOptions</key>
    <string>-Xms64m -Xmx512m</string>


  <key>CFBundleDocumentTypes</key>
    <array>
```

Step 4 If this file is locked, you see an error such as the following:



The file "Info.plist" is locked because you haven't made any changes to it recently.

If you want to make changes to this document, click Unlock. To keep the file unchanged and work with a copy, click Duplicate.

Step 5 Click **Unlock** and save the file.

If you do not see the **Unlock** dialog box, exit the editor, right-click the **Cisco ASDM-IDM** icon, choose **Copy Cisco ASDM-IDM**, and paste it to a location where you have write permissions, such as the Desktop. Then change the heap size from this copy.

ASA and ASDM Compatibility

For information about ASA/ASDM software and hardware requirements and compatibility, including module compatibility, see Cisco Secure Firewall ASA Compatibility.

VPN Compatibility

For VPN compatibility, see Supported VPN Platforms, Cisco ASA 5500 Series.

New Features

This section lists new features for each release.

Note New, changed, and deprecated syslog messages are listed in the syslog message guide.

New Features in ASA 9.22(1.1)/ASDM 7.22(1)

Released: September 16, 2024

Note 9.22(1) was not released.

Feature	Description
Platform Features	
Secure Firewall 1210/1220	The Secure Firewall 1210/1220 is a compact desktop firewall with a built-in switch and, depending on the model, Power over Ethernet+ (PoE+). • Secure Firewall 1210CE—Includes 8 1Gbps RJ-45 copper data ports. • Secure Firewall 1210CP—Includes PoE+ on four of those ports. • Secure Firewall 1220CX—Includes two additional 10Gbps SFP+ ports and higher performance.

Feature	Description
ASA Virtual Supports Dual-Arm Deployment Mode on AWS with GWLB	ASA Virtual now supports the dual-arm deployment mode on AWS with GWLB. This mode enables ASA Virtual to directly forward internet-bound traffic to the internet through the internet gateway after traffic inspection, while also performing network address translation (NAT). The dual-arm mode differs from the single-arm mode, which helps in routing inspected outbound traffic back to the GWLB, and then to the internet through the internet gateway. The dual-arm mode supports forwarding of inspected traffic from ASA Virtual to the internet in both single VPC and multiple VPC network environments. The advantages of the dual-arm mode in ASA Virtual are: • Minimize traffic hops, thereby reducing traffic latency and improving throughput performance. • Consolidate and inspect outbound traffic from multiple VPCs before forwarding it to the internet. • Provide a cost-effective solution because of reduced infrastructure requirements. For more information, see Cisco Secure Firewall ASA Virtual Getting Started Guide, 9.22.
Deploy the Cisco Secure Firewall ASA container (ASAc) in a Kubernetes or Docker Environment	A container is a software package that bundles up code and associated requirements such as system libraries, system tools, default settings, and so on, to ensure that the application runs successfully in a computing environment. You can deploy the ASA container (ASAc) in an open-source Kubernetes or Docker environment.
Firewall Features	
Object group search optimization.	The object group search feature has been enhanced to reduce object lookup time when evaluating access control rules to match connections and to reduce CPU overhead. There are no changes to configuring object group search, the optimized behavior happens automatically. We added the following commands in the device CLI, or enhanced command output: **clear asp table network-object**, **debug ac logs**, **packet-tracer**, **show access-list**, **show asp table network-group**, **show object-group**.
High Availability and Scalability Features	
Secure Firewall 3100 and 4200 maximum cluster nodes increased to 16.	For the Secure Firewall 3100 and 4200, the maximum nodes were increased from 8 to 16.
Secure Firewall 3100 and 4200 cluster Individual interface mode	Individual interfaces are normal routed interfaces, each with their own *Local IP address* used for routing. The *Main cluster IP address* for each interface is a fixed address that always belongs to the control node. When the control node changes, the Main cluster IP address moves to the new control node, so management of the cluster continues seamlessly. Load balancing must be configured separately on the upstream switch. New/Modified commands: **cluster interface-mode individual** New/Modified screens: **Wizards >** > **High Availability and Scalability Wizard**

Feature	Description
ASA Virtual Clustering deployment support on the AWS Multi-Availability Zone	You can now deploy and configure the ASA virtual cluster across multiple availability zones in an AWS region. The cluster also has dynamic scaling capability (Autoscale), which helps in scaling up or scaling down virtual devices based on demand. Extending the ASA virtual cluster across multiple availability zones in an AWS region enables continuous traffic inspection and dynamic scaling during disaster recovery. For more information, see Deploy a Cluster for the ASA Virtual in a Public Cloud.
License Features	
Smart Transport is the default Smart Licensing transport	Smart Licensing now uses Smart Transport as the default transport. You can optionally enable the former type, Smart Call Home, if necessary. New/Modified screens: **Configuration** > **Device Management** > **Licensing** > **Smart Licensing**
ASAvU (Unlimited) license to deploy ASA virtuals with 32 cores and 64 cores	ASAvU license achieves maximum throughput on deployments with 32 cores and 64 cores and is supported only on VMware and KVM. New/Modified screens: **Configuration** > **Device Management** > **Licensing** > **Smart Licensing**.
Administrative, Monitoring, and Troubleshooting Features	
Disable the USB port (disk1)	By default, the type-A USB port (disk1) is enabled and could not be disabled. You can now disable USB port access for security purposes on the following models: • Firepower 1000 • Secure Firewall 3100 • Secure Firewall 4200 This setting is stored in firmware and requires a reload. Moreover, if the USB port is disabled and you downgrade to a version that does not support this feature, the port will remain disabled and you cannot re-enable it without erasing the NVRAM. **Note** This feature does not affect the type-B USB console port, if present. New/Modified screens: . • **Configuration** > **Device Management** > **Advanced** > **Enable/Disable USB Port** • **Monitoring** > **Properties** > **USB Port** > **USB Port Info**
VPN Features	
DTLS Crypto Acceleration	Cisco Secure Firewall 4200 and 3100 series support DTLS cryptographic acceleration. The hardware performs DTLS encryption and decryption, and improves the throughput of the DTLS-encrypted and DTLS-decrypted traffic. The hardware also performs optimization of the egress-encrypted packets to improve latency. New/Modified screens: **Configuration > Firewall > Advanced > DTLS Offload > DTLS Offload** and **Egress Optimization for DTLS Offload** check boxes.

Upgrade the Software

This section provides the upgrade path information and a link to complete your upgrade.

Upgrade Link

To complete your upgrade, see the ASA upgrade guide.

Upgrade Path: ASA Appliances

To view your current version and model, use one of the following methods:

- ASDM: Choose **Home** > **Device Dashboard** > **Device Information**.
- CLI: Use the **show version** command.

This table provides upgrade paths for ASA. Some older versions require an intermediate upgrade before you can upgrade to a newer version. Recommended versions are in **bold**.

Be sure to check the upgrade guidelines for each release between your starting version and your ending version. You may need to change your configuration before upgrading in some cases, or else you could experience an outage.

For guidance on security issues on the ASA, and which releases contain fixes for each issue, see the ASA Security Advisories.

Note ASA 9.20 was the final version for the Firepower 2100.

ASA 9.18 was the final version for the Firepower 4110, 4120, 4140, 4150, and Security Modules SM-24, SM-36, and SM-44 for the Firepower 9300.

ASA 9.16 was the final version for the ASA 5506-X, 5508-X, and 5516-X.

ASA 9.14 was the final version for the ASA 5525-X, 5545-X, and 5555-X.

ASA 9.12 was the final version for the ASA 5512-X, 5515-X, 5585-X, and ASASM.

ASA 9.2 was the final version for the ASA 5505.

ASA 9.1 was the final version for the ASA 5510, 5520, 5540, 5550, and 5580.

Table 2: Upgrade Path

Current Version	Interim Upgrade Version	Target Version
9.20	—	Any of the following: → **9.22**
9.19	—	Any of the following: → **9.22** → **9.20**

Current Version	Interim Upgrade Version	Target Version
9.18	—	Any of the following: → **9.22** → **9.20** → **9.19**
9.17	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18**
9.16	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17
9.15	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16**
9.14	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16**

Current Version	Interim Upgrade Version	Target Version
9.13	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16** → 9.14
9.12	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16** → 9.14
9.10	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16** → 9.14 → 9.12

Current Version	Interim Upgrade Version	Target Version
9.9	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16** → 9.14 → 9.12
9.8	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16** → 9.14 → 9.12
9.7	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16** → 9.14 → 9.12 → 9.8

Current Version	Interim Upgrade Version	Target Version
9.6	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16** → 9.14 → 9.12 → 9.8
9.5	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16** → 9.14 → 9.12 → 9.8
9.4	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16** → 9.14 → 9.12 → 9.8

Current Version	Interim Upgrade Version	Target Version
9.3	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16** → 9.14 → 9.12 → 9.8
9.2	—	Any of the following: → **9.22** → **9.20** → **9.19** → **9.18** → 9.17 → **9.16** → 9.14 → 9.12 → 9.8
9.1(2), 9.1(3), 9.1(4), 9.1(5), 9.1(6), or 9.1(7.4)	—	Any of the following: → 9.14 → **9.12** → 9.8 → 9.1(7.4)
9.1(1)	→ 9.1(2)	Any of the following: → 9.14 → **9.12** → 9.8 → 9.1(7.4)

Current Version	Interim Upgrade Version	Target Version
9.0(2), 9.0(3), or 9.0(4)	—	Any of the following: → 9.14 → **9.12** → 9.8 → 9.6 → 9.1(7.4)
9.0(1)	→ 9.0(4)	Any of the following: → 9.14 → **9.12** → 9.8 → 9.1(7.4)
8.6(1)	→ 9.0(4)	Any of the following: → 9.14 → **9.12** → 9.8 → 9.1(7.4)
8.5(1)	→ 9.0(4)	Any of the following: → **9.12** → 9.8 → 9.1(7.4)
8.4(5+)	—	Any of the following: → **9.12** → 9.8 → 9.1(7.4) → 9.0(4)
8.4(1) through 8.4(4)	→ 9.0(4)	→ **9.12** → 9.8 → 9.1(7.4)

Current Version	Interim Upgrade Version	Target Version
8.3	→ 9.0(4)	Any of the following: → **9.12** → 9.8 → 9.1(7.4)
8.2 and earlier	→ 9.0(4)	Any of the following: → **9.12** → 9.8 → 9.1(7.4)

Upgrade Path: ASA Logical Devices for the Firepower 4100/9300

For upgrading, see the following guidelines:

- FXOS—For 2.2.2 and later, you can upgrade directly to a higher version. When upgrading from versions earlier than 2.2.2, you need to upgrade to each intermediate version. Note that you cannot upgrade FXOS to a version that does not support your current logical device version. You will need to upgrade in steps: upgrade FXOS to the highest version that supports your current logical device; then upgrade your logical device to the highest version supported with that FXOS version. For example, if you want to upgrade from FXOS 2.2/ASA 9.8 to FXOS 2.13/ASA 9.19, you would have to perform the following upgrades:

  1. FXOS 2.2→FXOS 2.11 (the highest version that supports 9.8)
  2. ASA 9.8→ASA 9.17 (the highest version supported by 2.11)
  3. FXOS 2.11→FXOS 2.13
  4. ASA 9.17→ASA 9.19

- ASA—ASA lets you upgrade directly from your current version to any higher version, noting the FXOS requirements above.

Table 3: ASA or Threat Defense, and Firepower 4100/9300 Compatibility

FXOS Version	Model	ASA Version	Threat Defense Version
2.16	Firepower 4112	**9.22** (recommended) 9.20 9.19 9.18 9.17 9.16 9.14	**7.6** (recommended) 7.4 7.3 7.2 7.1
	Firepower 4145 Firepower 4125 Firepower 4115	**9.22** (recommended) 9.20 9.19 9.18 9.17 9.16 9.14	**7.6** (recommended) 7.4 7.3 7.2 7.1
	Firepower 9300 SM-56 Firepower 9300 SM-48 Firepower 9300 SM-40		
2.14(1)	Firepower 4112	**9.20** (recommended) 9.19 9.18 9.17 9.16 9.14	**7.4** (recommended) 7.3 7.2 7.1 7.0 6.6
	Firepower 4145 Firepower 4125 Firepower 4115	**9.20** (recommended) 9.19 9.18 9.17 9.16 9.14	**7.4** (recommended) 7.3 7.2 7.1 7.0 6.6
	Firepower 9300 SM-56 Firepower 9300 SM-48 Firepower 9300 SM-40		

FXOS Version	Model	ASA Version	Threat Defense Version
2.13	Firepower 4112	**9.19** (recommended) 9.18 9.17 9.16 9.14	**7.3** (recommended) 7.2 7.1 7.0 6.6
	Firepower 4145 Firepower 4125 Firepower 4115	**9.19** (recommended) 9.18 9.17 9.16 9.14	**7.3** (recommended) 7.2 7.1 7.0 6.6
	Firepower 9300 SM-56 Firepower 9300 SM-48 Firepower 9300 SM-40		
2.12	Firepower 4112	**9.18** (recommended) 9.17 9.16 9.14	**7.2** (recommended) 7.1 7.0 6.6
	Firepower 4145 Firepower 4125 Firepower 4115	**9.18** (recommended) 9.17 9.16 9.14 9.12	**7.2** (recommended) 7.1 7.0 6.6 6.4
	Firepower 9300 SM-56 Firepower 9300 SM-48 Firepower 9300 SM-40		
	Firepower 4150 Firepower 4140 Firepower 4120 Firepower 4110	**9.18** (recommended) 9.17 9.16 9.14 9.12	**7.2** (recommended) 7.1 7.0 6.6 6.4
	Firepower 9300 SM-44 Firepower 9300 SM-36 Firepower 9300 SM-24		

FXOS Version	Model	ASA Version	Threat Defense Version
2.11	Firepower 4112	**9.17** (recommended) 9.16 9.14	**7.1** (recommended) 7.0 6.6
	Firepower 4145 Firepower 4125 Firepower 4115	**9.17** (recommended) 9.16 9.14 9.12	**7.1** (recommended) 7.0 6.6 6.4
	Firepower 9300 SM-56 Firepower 9300 SM-48 Firepower 9300 SM-40		
	Firepower 4150 Firepower 4140 Firepower 4120 Firepower 4110	**9.17** (recommended) 9.16 9.14 9.12 9.8	**7.1** (recommended) 7.0 6.6 6.4
	Firepower 9300 SM-44 Firepower 9300 SM-36 Firepower 9300 SM-24		
2.10 **Note** For compatibility with 7.0.2+ and 9.16(3.11)+, you need FXOS 2.10(1.179)+.	Firepower 4112	**9.16** (recommended) 9.14	**7.0** (recommended) 6.6
	Firepower 4145 Firepower 4125 Firepower 4115	**9.16** (recommended) 9.14 9.12	**7.0** (recommended) 6.6 6.4
	Firepower 9300 SM-56 Firepower 9300 SM-48 Firepower 9300 SM-40		
	Firepower 4150 Firepower 4140 Firepower 4120 Firepower 4110	**9.16** (recommended) 9.14 9.12 9.8	**7.0** (recommended) 6.6 6.4
	Firepower 9300 SM-44 Firepower 9300 SM-36 Firepower 9300 SM-24		

FXOS Version	Model	ASA Version	Threat Defense Version
2.9	Firepower 4112	9.14	6.6
	Firepower 4145 Firepower 4125 Firepower 4115	9.14 9.12	6.6 6.4
	Firepower 9300 SM-56 Firepower 9300 SM-48 Firepower 9300 SM-40		
	Firepower 4150 Firepower 4140 Firepower 4120 Firepower 4110	9.14 9.12 9.8	6.6 6.4
	Firepower 9300 SM-44 Firepower 9300 SM-36 Firepower 9300 SM-24		
2.8	Firepower 4112	**9.14**	**6.6** **Note** 6.6.1+ requires FXOS 2.8(1.125)+.
	Firepower 4145 Firepower 4125 Firepower 4115	**9.14** (recommended) 9.12 **Note** Firepower 9300 SM-56 requires ASA 9.12(2)+	**6.6** (recommended) **Note** 6.6.1+ requires FXOS 2.8(1.125)+. 6.4
	Firepower 9300 SM-56 Firepower 9300 SM-48 Firepower 9300 SM-40		
	Firepower 4150 Firepower 4140 Firepower 4120 Firepower 4110	**9.14** (recommended) 9.12 9.8	**6.6** (recommended) **Note** 6.6.1+ requires FXOS 2.8(1.125)+. 6.4 6.2.3
	Firepower 9300 SM-44 Firepower 9300 SM-36 Firepower 9300 SM-24		

FXOS Version	Model	ASA Version	Threat Defense Version
2.6(1.157) **Note** You can now run ASA 9.12+ and FTD 6.4+ on separate modules in the same Firepower 9300 chassis	Firepower 4145 Firepower 4125 Firepower 4115	**9.12** **Note** Firepower 9300 SM-56 requires ASA 9.12.2+	**6.4**
	Firepower 9300 SM-56 Firepower 9300 SM-48 Firepower 9300 SM-40		
	Firepower 4150 Firepower 4140 Firepower 4120 Firepower 4110	**9.12** (recommended) 9.8	**6.4** (recommended) 6.2.3
	Firepower 9300 SM-44 Firepower 9300 SM-36 Firepower 9300 SM-24		
2.6(1.131)	Firepower 9300 SM-48 Firepower 9300 SM-40	**9.12**	Not supported
	Firepower 4150 Firepower 4140 Firepower 4120 Firepower 4110	**9.12** (recommended) 9.8	
	Firepower 9300 SM-44 Firepower 9300 SM-36 Firepower 9300 SM-24		
2.3(1.73)	Firepower 4150 Firepower 4140 Firepower 4120 Firepower 4110	9.8 **Note** 9.8(2.12)+ is required for flow offload when running FXOS 2.3(1.130)+.	**6.2.3** (recommended) **Note** 6.2.3.16+ requires FXOS 2.3.1.157+
	Firepower 9300 SM-44 Firepower 9300 SM-36 Firepower 9300 SM-24		

FXOS Version	Model	ASA Version	Threat Defense Version

2.3(1.66)
2.3(1.58)
	Firepower 4150
	Firepower 4140
	Firepower 4120
	Firepower 4110
		9.8
		Note 9.8(2.12)+ is required for flow offload when running FXOS 2.3(1.130)+.	

	Firepower 9300 SM-44 Firepower 9300 SM-36 Firepower 9300 SM-24		
2.2	Firepower 4150 Firepower 4140 Firepower 4120 Firepower 4110	**9.8**	Threat Defense versions are EoL
	Firepower 9300 SM-44 Firepower 9300 SM-36 Firepower 9300 SM-24		

Note on Downgrades

Downgrade of FXOS images is not officially supported. The only Cisco-supported method of downgrading an image version of FXOS is to perform a complete re-image of the device.

Open and Resolved Bugs

The open and resolved bugs for this release are accessible through the Cisco Bug Search Tool. This web-based tool provides you with access to the Cisco bug tracking system, which maintains information about bugs and vulnerabilities in this product and other Cisco hardware and software products.

Note You must have a Cisco.com account to log in and access the Cisco Bug Search Tool. If you do not have one, you can register for an account. If you do not have a Cisco support contract, you can only look up bugs by ID; you cannot run searches.

For more information about the Cisco Bug Search Tool, see the Bug Search Tool Help & FAQ.

Open Bugs in Version 7.22(1)

There are no open bugs in this release.

Resolved Bugs in Version 7.22(1)

The following table lists select resolved bugs at the time of this Release Note publication.

Identifier	Headline
CSCwa87515	ASDM session disconnects while switching between the context
CSCwh18177	ASDM backup restore replaces custom policy-map with default class inspect options
CSCwh50291	Checkbox of Enable autogeneration of MAC addresses not working properly
CSCwi11925	Unable to use 'any' keyword as an object when editing object-group through ASDM
CSCwj14147	ASDM fails to load access-group config if L2 and L3 acl's are mixed.
CSCwj14498	Source & Destination file extension error pop-up from ASDM GUI
CSCwj17213	Change in Application Client Type attribute
CSCwj28481	ASDM applies new rules in the incorrect order when "forward-referenced" lines are present
CSCwj66085	ASA is unable to export NAT rules via ASDM in .csv format
CSCwk64399	ASDM- Unable to edit Secure Client Profile

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Related Documentation

For additional information on the ASA, see Navigating the Cisco Secure Firewall ASA Series Documentation.